



INDIANA DEPARTMENT OF TRANSPORTATION

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TO: District Deputy Commissioners
District Highway Maintenance Directors
District Technical Services Directors
District Permit Managers

**PERMIT
OPERATIONS
MEMORANDUM 20-02**

FROM: Monica Hartke-Tarr
Statewide Permits Director

SUBJECT: Agricultural Dragline Use of Cross Structures & Ditches on INDOT
Right-of-Way

INTRODUCTION

Heavy farm trucks can do serious damage to roads and bridges. In an effort to reduce damage to Indiana's transportation infrastructure, the agricultural industry has requested to transport animal waste fertilizer through temporary pipelines (known as "draglines"). INDOT structures are proposed to be used by private farm operations to distribute this raw fertilizer (liquified manure) through hoses or small pipes installed within drain structures. The hoses or pipes can deliver fertilizer to properties on the other side of the roadway. Hoses or pipes may also run along roadways within INDOT right-of-way.

This memorandum clarifies the Department's position on distribution lines for fertilizer along INDOT right-of-way and within INDOT structures. It establishes permitting requirements for all future use of INDOT right-of-way and structures for these purposes. *For the spring fertilizer application season of 2020, a special process allowing emergency permit applications is set out at the end of this memorandum.*

BACKGROUND

Manure is collected on certain farm properties and can serve to fertilize fields on other properties which may be miles away. According to sources in Indiana's agricultural industry, dragline or direct-flow fertilizer application systems serve as a more efficient and economical alternative compared to delivering fertilizer by truck, which presents other risks and puts more vehicle use on rural roadways and highways.

These temporary transfer lines run in or along a road ditch or crossing under roadways through drain structures such as culverts. Typically, these operations are installed on a short-term basis of a few days, as warranted by conditions such as weather.

The Department recognizes the burdens on farming operations, and the necessity to effectively distribute fertilizer. This policy's intent is to allow for permissible means to consent to this practice, allowing efficiency of farming operations while also assuring safety to the public.

DESCRIPTION OF THE DRAGLINING PROCESS

Draglining is a method of fertilizer application that creates a direct link between the livestock area where manure is collected in liquified form, and crops in need of fertilization. After travelling to the destination field, land application equipment injects the fertilizer below the soil's surface. A series of pumps makes this possible. One pump at the livestock site and a series of booster pumps along the line maintain sufficient pressure for the land application equipment to function properly.

Hoses are polyurethane with a mesh cloth material impregnated into the construction, generally rated at 200 PSI with a 600 PSI burst pressure. An outside covering coats the mesh. Visual inspection of the hose for wear to the coating to must be done prior to use, to determine if the hose needs replacement.

The system is monitored by the operator for drops in pressure while in use. Pressure monitoring ensures that issues are detected immediately, so the system can be shut down and any hose issue or other equipment malfunction can be repaired.

Draglining technology allows land application of fertilizer up to two miles from the manure source, maintaining a direct connection. Pumps with a booster can deliver fertilizer up to seven or eight miles from the manure source.

USE OF RIGHT-OF-WAY

Pursuant to IC 8-23-2-5.5, IC 8-23-6-6, and 105 IAC Art. 7, INDOT's Permits Division is authorized to establish permit requirements and restrictions for all use and work performed in the Department's public right-of-way.

As such, for any future dragline systems on state right of-way, users must obtain permission from INDOT to conduct these activities, by means of a permit. A permit application will also require a bond to cover all potential impacts to INDOT property. Approved permits will be issued for a one-year period and may be renewed annually.

PERMIT APPLICATION FOR USE OF INDOT RIGHT-OF-WAY OR DRAIN STRUCTURES:

The following steps outline how a dragline operator may apply for this type of a permit using INDOT's [Electronic Permit System](#) (EPS):

1. If a new EPS account is needed, register for a new account on the login screen.
2. After logging in, create a new permit.
3. Select permit type "Miscellaneous" and subtype "Ag Dragline."
4. Complete the required information.

5. Pay the \$15 permit fee, which may be paid as a one-time credit card charge or as an [IN.gov subscriber](#).
6. Obtain, complete, and upload bond documentation, which may be a performance bond in the amount of \$10,000, or a blanket bond in an amount sufficient to cover multiple permits and can be extended in perpetuity.
7. Upload the following supporting documentation:
 - A document that identifies what content will be passing through the dragline.
 - A document that includes the frequency (e.g., once or twice a year) and time of year (e.g., month) that the application will be completed.
 - A document that provides the diameter size of the dragline, distribution hose, or pipe (not to exceed 10 inches in outside diameter).
 - Documentation indicating the diameter size of the culvert or drain structure (not to be less than 24 inches in outside diameter).
 - Documentation verifying property ownership for both the manure source location and the destination field(s).
 - Legal land descriptions for all property occupied by the system.
 - Detailed map: An aerial photo (which may use internet sources such as Google Earth) or map (may be hand-drawn) that identifies the following:
 - Location of manure source and destination field(s)
 - All INDOT right-of-way to be used
 - All INDOT drain structures to be used
 - Parallel and crossing points: Where the dragline will be placed in the right-of-way and where it will cross the road
 - Location of distribution hose
 - All approaches: How the dragline would cross the approach, and how roadway access for local landowners and travelers would be maintained if the dragline does not pass under the roadway
 - For longitudinal runs in front of a residence and/or through a private drive pipe, an Additional Disclosure form will be required to be signed by the resident.
 - Inspection photos and video, which contain a date stamp, to record the date the photos and video were taken, must be provided. The photos and video should show the condition of the structure, the surface conditions of ditches, and ingress and egress of the drainage structures.
 - Maintenance of Traffic (MOT) documentation, documenting how traffic will be safely accommodated while work is being done within the right-of-way.
 - Documentation of quality assurance/quality control procedures.
 - Emergency manure spill plan, including a listing of contacts.
 - A contact list of adjoining landowners (who would need to be contacted in the event they are impacted by a spill or leak).

ADDITIONAL PERMITTING REQUIREMENTS

- An INDOT permit is also contingent upon all other necessary permits or compliance with regulations (e.g., environmental, local, etc.)
- Delivery pipe or hoses must be in good operating condition with no leaks or loose connections that would cause spillage. Prior to application, the hose or pipe must be fully connected beyond the limits of INDOT right-of-way.
- **Preliminary and post application inspections:** At certain points, an inspection may be required, done by INDOT Asset Management or an INDOT Permit Inspector.
 - A preliminary inspection must occur if no documented inspection has been conducted in the past two years by Asset Management, or if the inspection videos/photos provided by the applicant/permittee indicate questionable conditions. If required, the preliminary inspection must occur within 15 days before the anticipated use.
 - A post-application inspection is required before release of the permit and bond.
- **Notice to INDOT of fertilizer application:** The applicant/permittee is required to notify INDOT at least three weeks before a dragline application, to allow for a preliminary inspection by INDOT staff if warranted. Notification must be done in writing, either by EPS message or email to the respective Permit Investigator. Failure to provide timely notice to INDOT may result in revocation of the permit.
- Dragline travel through drain structures is not permitted under interstates. No excavation or alteration of any kind is permitted on interstate right-of-way.
- No dragline splices or joints are permitted within the culvert or pipe.
- No INDOT fencing must be cut, removed, or damaged.
- No work can be performed which will improperly interfere with traffic. Unloading equipment on the roadway or roadway shoulders is not permitted unless performed with appropriate traffic control.
- Parking vehicles or equipment on the roadway or roadway shoulders is prohibited.
- Driving onto the mainline roadway from the ditch, or driving on the shoulders where damage will occur, is also prohibited.
- If the roadway or roadway shoulders are damaged as a result of these operations, they must be repaired immediately or within a reasonable timeframe as determined by INDOT.
- All repairs by the applicant must be made with suitable and approved materials; replacement must conform to existing grades.
- Right-of-way, including all drain structures and soil, must be restored to original condition as it existed prior to the permitted work.
- The dragline must be immediately removed if it causes any hydraulic capacity problems. INDOT reserves the right to require the immediate suspension of pumping operations and removal of the dragline if conditions warrant.
- Crossings must be as close as practical to perpendicular to the roadway corridor.

- Where crossing the right-of-way, draglines must be sleeved for the entire length (from one right-of-way line to the other) with a larger diameter conduit with a working pressure rating equal to or greater than the working pressure of the pumping system.
- Retro reflective drums (or an equivalent) must be placed in ditch bottoms to warn ATV and other off-road traffic of the presence of the pipe crossing.
- For INDOT structures that are part of a County's legal drain system, the County Drainage Board must approve of the temporary reduction in capacity of the legal drain prior to any work activity commencing.
- To properly control traffic, the MUTCD must be followed. *NOTE: Signs must be professional and cannot be handwritten or painted (permittees should consult the local municipality or sign rental companies). It is recommended that the permittee utilize flaggers where draglines enter and exit roadway's right-of-way.*
- In the event of a spill or leak, the permittee is required to immediately contact the INDOT District office that approved the permit, and promptly notify all affected property owners.
- The permit applicant, and all contractors, must expressly accept all responsibility for all negative consequences for any failure of equipment or processes.

RENEWAL

Renewal of the permit beyond its one-year term may be accomplished by a request made in EPS and payment of a new application fee (and if necessary, establishing a new performance bond).

SUMMARY

Those who plan to use INDOT property for a dragline fertilizer application system should plan ahead to obtain permission INDOT and all other involved entities such as local governments. This memorandum shows how the Department stands ready to support the state's agricultural industry with a process that also ensures safety and protects public assets.

SPECIAL PROCESS TO ALLOW TIME-SENSITIVE PERMITTING IN 2020

Given the time-sensitive nature of spring fertilizer application this year, in 2020 INDOT will allow applications for agricultural dragline permits to be applied for under emergency provisions as outlined in the INDOT [Permit Guide](#), Section 9. See INDOT's [Permits webpage](#) for information and the form for an emergency preliminary application. Once the emergency preliminary application has been submitted, an application in EPS must be completed within five days of submitting the preliminary application.

INDOT Customer Service Toll Free Line 855-INDOT4U (463-6848)

[https://www.in.gov/indot/files/District Permits Map.pdf](https://www.in.gov/indot/files/District%20Permits%20Map.pdf)